

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,286	07/07/2000	Julio A. Abusleme	108910-00011	8395
7	590 04/22/2003			
Arent Fox Kintner Plotkin & Kahn PLLC Suite 600 1050 Connecticut Avenue NW			EXAMINER	
			SHOSHO, CALLIE E	
Washington, DC 20036-5339			ART UNIT	PAPER NUMBER
			1714	16
			DATE MAILED: 04/22/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

1		Application No.	Applicant(s)				
		09/612,286	ABUSLEME ET AL.				
* Office Action Summary		Examiner	Art Unit				
		Callie E. Shosho	1714				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status							
1)🖂	Responsive to communication(s) filed on 04 F	ebruary 2003 .					
2a) 🗌		s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims							
4)⊠ Claim(s) <u>1,3 and 7-9</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)□	5) Claim(s) is/are allowed.						
6)⊠	6)⊠ Claim(s) <u>1,3 and 7-9</u> is/are rejected.						
7)	7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)□	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) 🔲 -	The proposed drawing correction filed on	is: a) ☐ approved b) ☐ disapprov	ved by the Examiner.				
	If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)[	a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified explication and received.							
* See the attached detailed Office action for a list of the certified copies not received.							
1	14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal Pa	(PTO-413) Paper No(s) atent Application (PTO-152)				
U.S. Patent and Tra PTO-326 (Rev		on Summary	Part of Paper No. 16				

Art Unit: 1714

#### **DETAILED ACTION**

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 2/4/03.

In light of the new grounds of rejection as set forth below in paragraphs 3 and 5, the following action is non-final.

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1, 3, and 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "in the presence of a microemulsion of (per)fluoropolyoxyalkylene, a fluorinated surfactant and an inorganic initiator". The scope of the claim is confusing because it is not clear if the fluorinated surfactant is part of the microemulsion or an additional surfactant. In light of the disclosure in the present specification on page 4, lines 14-15 of "fluorinated surfactant of the microemulsion" and example 1 which discloses microemulsion of water, (per)fluoropolyoxyalkylene, and fluorinated surfactant, it would appear that the fluorinated surfactant is part of the microemulsion. Clarification is requested.

Art Unit: 1714

## Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 3, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Abusleme et al. (U.S. 5,498,680).

Abusleme et al. disclose a process of synthesizing chlorotrifluoroethylene homopolymer or copolymer with additional fluorinated monomers including perfluorinated monomers wherein the process is conducted in the presence of microemulsion which comprises perfluoropolyoxyalkylenes, fluorinated surfactant identical to that presently claimed, and alkali metal persulfate initiator. The process is conducted at temperature of 10<sup>0</sup>-150<sup>0</sup> C and 15-40 bar (col.1, lines 19-27, col.4, lines 5-21, 30-34, and 63-64, col.5, lines 18-41, 47-48, 51-52, and 55-56, and col.6, lines 17-21).

In light of the above, it is clear that Abusleme et al. anticipates the present claims.

#### Claim Rejections - 35 USC § 103

- 6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abusleme et al. (U.S.5,498,680) in view of Campbell et al. (U.S. 4,577,044).

Art Unit: 1714

The disclosure with respect to Abusleme et al. in paragraph 5 above is incorporated here by reference.

The difference between Abusleme et al. and the present claimed invention is the requirement in the claims of liquid chlorotrifluoroethylene.

Campbell et al., which is drawn to process of preparing chlorotrifluoroethylene telomers, disclose the use of liquid chlorotrifluoroethylene in the reaction medium which allows for the use of lower process temperatures (col.2, lines 14-23 and 35-45).

In light of the motivation for using liquid chlorotrifluoroethylene disclosed by Campbell et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use liquid chlorotrifluoroethylene in the process of Abusleme et al. in order to control the process temperature, and thereby arrive at the claimed invention.

# Response to Arguments

8. Applicants' arguments field 2/4/03 have been fully considered but they are not persuasive.

Specifically, applicants argue that:

- (a) Abusleme et al. is not a relevant reference against the present claims given that there is no disclosure in Abusleme et al. of combination of specific fluorinated surfactant and initiator as presently claimed.
- (b) Abusleme et al. disclose use of microemulsion of fluoropolyoxyalkylene not microemulsion of (per)fluoropolyoxyalkylene as presently claimed.
  - (c) Campbell et al. is not a relevant reference against the present claims.

Art Unit: 1714

With respect to argument (a), applicants argue that Abusleme et al. disclose long list of suitable surfactants of which the presently claimed surfactant is but one and long list of suitable initiators of which the presently claimed initiator is but one.

However, firstly, it is noted that col.5, lines 25-36 of Abusleme et al. disclose the use of fluorinated surfactant identical to that presently claimed and thus with respect to the surfactant, one of ordinary skill in the art would not have to choose from long list of surfactants (see also response to argument (b) below).

Further, although Abusleme et al. disclose the use of other types of initiators, applicant's attention is drawn to MPEP 2131.02 (A) which states that "...when the species is clearly named, the species claim is anticipated no matter how many other species are additionally named". Ex Parte A, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990).

It is noted that Abusleme et al. disclose the use of initiators which include alkali metal persulfates and ammonium persulfates. The comparative data in the present specification compares invention within the scope of the present claims, i.e. utilizing potassium persulfate (example 1), with invention outside the scope of the present claims, i.e. comprising ammonium persulfate (example 5). It is shown that the process of the present invention produces chlorotrifluoroethylene polymer with no discoloration while the comparative process produces a chlorotrifluoroethylene polymer which is discolored.

However, it is noted that the present claims are not rejected as being obvious over the cited art, but rather are anticipated over the prior art. Given that Abusleme et al. already disclose the use of initiator as presently claimed, the results of the comparison in the declaration are not believed to be unexpected or surprising.

Art Unit: 1714

With respect to argument (b), it is agreed that Abusleme et al. disclose the use of microemulsion of fluoropolyoxyalkylenes and not microemulsion of (per)fluoropolyoxyalkylenes as required in the present claims. However, it is noted that the microemulsion of fluoropolyoxyalkylenes disclosed by Abusleme et al. comprises not only fluoropolyoxyalkylenes but also (per)fluoropolyoxyalkylenes (col.4, lines 30-34). Thus, while Abusleme et al. do disclose the use of microemulsion of fluoropolyoxyalkylene, the microemulsion still comprises (per)fluoropolyoxyalkylene as required in the present claims. Further, Abusleme et al. disclose the use of fluorinated surfactant of the formula  $R_f$ -  $X^*M^+$  (col.5, lines 25-36) which is identical to the surfactant presently claimed.

Thus, given that the present claims require microemulsion of perfluoropolyoxyalkylene and fluorinated surfactant and given that Abusleme et al. disclose microemulsion comprising perfluoropolyoxyalkylene as well as fluorinated surfactant identical to that present claimed, it is clear that Abusleme et al. meet the requirements of the present claims.

NOTE: If applicant were to change the phrase "a microemulsion of (per)fluoropolyoxyalkylene, a fluorinated surfactant and an inorganic initiator" in claim 1 to "an inorganic initiator and a microemulsion consisting of water, (per)fluoropolyoxyalkylenes, and fluorinated surfactant", support for which is found, for instance, in example 1 of the present specification, the examiner would remove the rejections of record. Such change would overcome the rejections of record given that the recitation "consisting of" with respect to the microemulsion limits the microemulsion from containing any other ingredients besides those

Art Unit: 1714

explicitly recited in the claim, namely, water, (per)fluoropolyoxyalkylene, and fluorinated surfactant of the formula  $R_f$ - X M as set forth in the claim. Absuleme et al., however, disclose the use of microemulsion which requires as an essential ingredient fluoropolyoxyalkylenes which would be outside the scope of the "consisting of" claim language and thus, Abusleme et al. would no longer be a relevant reference against the present claims.

Further, it is noted that such change would also overcome the 35 USC rejection of record as set forth in paragraph 3 above.

With respect to argument (c), applicants argue that Campbell et al. is not a relevant reference given that Campbell et al. is drawn to a different process than presently claimed and therefore does not disclose surfactant, initiator, and (per)fluoropolyoxyalkylene microemulsion as presently claimed.

However, note that Campbell et al. is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely, that the use of liquid chlorotrifluoroethylene when synthesizing chlorotrifluoroethylene polymers allows for the use of lower process temperatures, and in combination with the primary reference, discloses the presently claimed invention.

Art Unit: 1714

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Callie E. Shosho

Examiner

Art Unit 1714

CS

April 19, 2003